Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – 20-Jan-2020

Time: Three Hours **Max. Marks: 70 Marks**

APPLIED BIOCHEMISTRY
(Revised Scheme 3)
Q.P. CODE: 2609

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Give the principle reaction involved in the electron transport chain, in the mitochondrion. (Explain with a diagram).
2. What are lipids? What are essential fatty acids? Describe the β oxidation of saturated and un saturated fatty acids.
3. Outline the biosynthesis of purine bases in our body.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Differentiate Prokaryotic and Eukaryotic cells.
5. Give the IUB classification of enzymes.
6. Differentiate essential and non-essential amino acids with examples.
7. Write short notes on high energy compounds.
8. Describe the TCA cycle.
9. Name the nitrogenous bases present in DNA and RNA.
10. Define oxidative phosphorylation and substrate level phosphorylation with example.
11. What is ketosis? Explain.

SHORT ANSWERS **10 x 2 = 20 Marks**

12. Define free energy.
13. Total energy produced in glucose metabolism.
14. Describe the role of hydrogen bonding in DNA.
15. Describe scurvy.
16. Name the essential fatty acids and give the structure of any one.
17. Give the significance of the determination of creatinine.
18. Define coenzyme with examples.
19. Give the significance of creatinine phosphate.
20. What is the function of cyclic AMP?
21. Give the conversion of glucose-6-phosphate to fructose-6-phosphate.

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